Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9

SECRET

MONTHLY REPORT

1 October - 31 October 1958

SYSTEMS ENGINEERING BRANCH
ENGINEERING STAFF

1. Logrithmic Periodic Antenna - Work has begun on the development of a theory for determining mounting heights and orientation so as to obtain a "frequency independent" vertical plane pattern for point to point applications. An investigation has also started concerning the mechanical problems involved in supporting a large wire type structure, with a lower frequency limitation of 7MC., and the erection and test of one type of full scale structure.

2. Two-way Radiotelephone System, WEMCA - The eight voice operated relays to provide the automatic alarm feature for this system were received during this reporting period. The relays were modified and rewired for use with the system and were shipped to WEMCA with the necessary operating instructions. We are at present investigating another device for the automatic alarm feature which should be more reliable and which we hope to be able to ship in the near future.

25X1

7. Evaluation progress reports and photographs of the Technical Materiel Corporation VRA-2 and ATS-50 antenna systems are being distributed to the field to keep them informed of the developments up to this time.

SECRET

Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9

Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9

8. An addendum to the XFK Frequency Shift Exciter Operating Instructions was issued to the field during this reporting period. It concerned precautions to be observed when modifying the XFK Frequency Shift Exciter for operation on 220 VAC.

25X1

10. FIELD ALIGNMENT PROCEDURE FOR 51-J RECEIVERS - In following up recent correspondence from Chief, SEACA, pertaining to field alignment of the Collins 51-J series receivers, we have discovered there is wide spread interest in the development of a simple, effective procedure for aligning receivers without the use of an external signal generator and indicating device. Such a procedure would enable the CT/R at a small station to improve the performance of his receiver without recourse to a base station repair and maintenance facility. A study has been made of two such procedures, which were developed separately, and of the alignment procedures set forth in pertinent instruction manuals. The procedure is now in rough-draft form, and will be tested in the near future, with accent on its application by personnel of LIMITED technical training and ability. If the tests prove its acceptability the procedure will then be sent to the field as a technical bulletin.

25X1

12. The safety switches for the 231-D and 16-F type transmitters were delivered this month. They are now being sent to the field. A Technical Bulletin explaining their installation and operation has already been disseminated. These switches open the high voltage interlock circuit and ground all sources of high voltage. Their installation is mandatory and should be a major step forward in providing increased protection for our personnel when working on these transmitters.

25X1

Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9

25X1
Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9

Page Denied

Next 1 Page(s) In Document Denied

Declassified in Part - Sanitized Copy Approved for Release 2012/07/02 : CIA-RDP78-02820A000400030087-9